

Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity



MINISTRY OF PUBLIC WORKS AND TRANSPORT

DEPARTMENT OF CIVIL AVIATION

# Lao Civil Aviation Regulation Part 17 Unmanned Aircraft

Volume 1: Unmanned Aircraft Volume 2: Unmanned Aerial Activities



MINISTRY OF PUBLIC WORKS AND TRANSPORT

DEPARTMENT OF CIVIL AVIATION

Lao Civil Aviation Regulation Part 17 – Unmanned Aircraft

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### PREAMBLE

The Department of Civil Aviation of Lao PDR, under the Decision of Minister of Public Works and Transport number 16948/MPWT regarding the authorization for signing all regulations, provisions of government management of flight safety, air navigation services, aviation security and standards of services in civil aviation sector.

This Regulation become effective on December 2017.

This Regulation consists of 2 Volumes and 7 Parts which provides requirements dealing with:

- Unmanned Aircraft
- Unmanned Aerial Activities

Approved by Director General Department of Civil Aviation of Lao PDR

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Vanpheng Chanthaphone

# AMENDMENTS AND CORRIGENDA

Amendments /Corrigenda No	Date of Issue	Page of Amended	Date of Ended	Entered by

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# Part 1 Preliminary

# **1.1. Applicability of This Subpart**

- (1) This subpart sets out the requirements for the operation of unmanned aircraft (including model aircraft and drone), and (to the extent that the operation of rockets, home-made rockets, fireworks display, releasing of balloons/helium balloons and sky lanterns affect or may affect the safety of air navigation) the operation of rockets and the use of certain fireworks.
- (2) Nothing in this subpart applies to the operation of a manned balloon or a hot air balloon.
- (3) Part 3 to 7 do not apply to the operation of:
  - (a) a control-line model aircraft (that is, a model aircraft that is constrained to fly in a circle, and is controlled in attitude and altitude, by means of inextensible wires attached to a handle held by the person operating the model); or
  - (b) a model aircraft indoors; or
  - (c) an unmanned airship indoors; or
  - (d) a small balloon within 100 meters of a structure and not above the top of the structure; or
  - (e) an unmanned tethered balloon that remains below 400 feet above ground level; or
  - (f) a firework rocket not capable of rising more than 400 feet above ground level.

*Note:* Part 2 applies to the operation of all unmanned aircraft (including model aircraft) and rockets, including firework rockets.

(4) For paragraph (3) (c), a flight does not take place indoors if the building in which it takes place has no roof, or 1 or more walls, removed.

# 1.2. Application of Registration and Marking Requirements

Lao Civil Aviation Safety Regulation Part 4 (Aircraft Registration and Marking) do not apply to an aircraft (other than a large UAV) to which this Part applies, nor to a micro UAV.

*Note:* A large UAV is required to carry a manufacturer's data plate and an aircraft registration identification.

# 1.3. Meaning of *Populous Area*

**Populous area** in relation to the operation of an unmanned aircraft or rocket if the area has a sufficient density of population for some aspect of the operation, or some event that might happen during the operation (in particular, a fault in, or failure of, the aircraft or rocket) to pose an unreasonable risk to the life, safety or property of somebody who is in the area but is not connected with the operation.

# 1.4. Approval of Areas for Operation of Unmanned Aircraft or Rockets

- (1) A person may apply to Department of Civil Aviation of Laos (Lao DCA) for the approval of an area as an area for the operation of:
  - (a) unmanned aircraft generally, or a particular class of unmanned aircraft; or
  - (b) rockets.
- (2) For paragraph (1)(a), the classes of unmanned aircraft are the following:
  - (a) tethered balloons and kites;
  - (b) unmanned free balloons and helium balloons;
  - (c) UAVs;
  - (d) model aircraft; and
  - (e) drones.
- (3) Lao DCA must take into account the likely effect on the safety of air navigation of the operation of unmanned aircraft in, or the launching of rockets in or over the area.
- (4) An approval has effect from the time written notice of it is given to the applicant, or a later day or day and time stated in the approval.
- (5) An approval may be expressed to have effect for a particular period (including a period of less than 1 day), or indefinitely.
- (6) Lao DCA may impose conditions on the approval in the interests of the safety of air navigation.
- (7) If Lao DCA approves an area under 1.4. (1), the AIS Providers must publish details of the approval (including any condition) in NOTAM or on an aeronautical chart.

- (8) Lao DCA may revoke the approval of an area, or change the conditions that apply to such an approval, in the interests of the safety of air navigation, but the details of any revocation or change must be published in NOTAM or on an aeronautical chart by the AIS Providers.
- (9) Lao DCA must also give written notice of the revocation or change:
  - (a) to the person who applied for the approval of the area; or
  - (b) if that person applied for that approval as an officer of an organization concerned with unmanned aircraft or rockets.

#### 1.5. Requirements in This Part to Give Information to Lao DCA

- (1) If a provision of this Part requires a person to give information to Lao DCA about the operation, launching or release of an unmanned aircraft, rocket or unmanned aerial activities, then, unless the provision says otherwise, the person may do so by giving the information to:
  - (a) if the person is an approved governmental organization the AIS Center; or
  - (b) an appropriate approved aviation administration organization (Military operation and so on).
- (2) However, 1.5. (1) does not apply in relation to the release of small balloons, or in relation to a firework display.
- (3) The information does not need to be given in writing unless:
  - (a) Lao DCA to which it is given asks for it to be given in writing in the particular case; or
  - (b) another provision of this regulation requires it to be given in writing.
- (4) If a person gives the information to an organization mentioned in paragraph 1.5 (1) (a) or
   (b), then, subject to 1.5. (6), the person is taken, for all purposes, to have complied with the requirement to give the information.
- (5) If in a particular case Lao DCA to which the information is given reasonably requires extra information about the operation, launching or release, Lao DCA may ask the person for the extra information.

- (6) If Lao DCA asks for more information under 1.5. (5), the person is not taken to have complied with the requirement mentioned in 1.5. (1) to give the information until the person gives to Lao DCA or the other approved organizations the extra information.
- (7) If a day is not a working day for the office of Lao DCA or the other approved organizations to which notice of an event is given or an application made, that day does not count for the purpose of working out how many working days' notice of the event has been given, or how many working days before an event the application has been made.
- (8) In 1.5 (7): *working day*, in relation to an office of Lao DCA, means a day on which that office is open on weekdays (Monday-Friday).

# 1.6. Exemptions

- (1) Lao DCA may do either or both of the following by instrument, in relation to a particular unmanned aircraft or rocket or type of unmanned aircraft or rocket:
  - (a) exempt the aircraft or rocket, or aircraft or rockets of that type, from compliance with a specified provision of Part 3 to 7;
  - (b) exempt a person from compliance with a specified provision of Part 3 to Part 7 while he or she is operating the aircraft or launching the rocket, or operating aircraft or launching rockets of that type.
- (2) Before Lao DCA decides under 1.6 (1) to exempt an aircraft, rocket or type, or a person, from compliance with a provision of any of Part 3 to Part 7, Lao DCA must take into account any relevant considerations relating to the safety of air navigation.
- (3) Lao DCA may impose a condition necessary in the interests of the safety of air navigation on such an exemption.
- (4) A person must not contravene a condition imposed under 1.6 (3).
- (4A) An offence against 1.6 (4) is an offence of strict liability.

# 1.7. Conditions Imposed by Lao DCA or Another Governmental Organization

(1) If a provision of this Part (other than 1.4) authorizes Lao DCA or another governmental organization to impose a condition on an approval, permission, certification or exemption, Lao DCA or the governmental organization must give a written statement of any condition so imposed to the person who applied for the approval, permission, certification or exemption.

(2) Unless Lao DCA or the governmental organization gives the statement to the person, the person is not bound by the condition.

# 1.8. Manufacturing, Assembling, Importing, Exporting, Selling or Leasing of Unmanned Aircraft

An unmanned aircraft of any mass category shall not be manufactured, assembled, exported, imported, sold, chartered, leased by any person unless he/she has satisfied the following requirements:

- a) The person has registered with the Lao DCA for manufacturing, assembling, importing, exporting, selling, chartering or leasing Unmanned Aircraft for the reasons of technical inspections, and
- b) The person maintains an updated record of details of each Unmanned Aircraft being manufactured, assembled, imported, exported, sold, chartered or leased, and if such aircraft is made available to a third person the following requirements must be complied.
  - (i) Name of the third person, address, emergency contact information (email and mobile number) and National Identity Card number.
  - (ii) Product, type/model and Serial Number and any other identification of the Unmanned Aircraft.
  - (iii) Product serial numbers of accessory units that may be provided with the Unmanned Aircraft such as cameras, remote control, other sensors etc.
  - (iv) For Unmanned Aircraft weights above 200 grams but below 1 kilogram, the third person is informed in writing of the requirements of;
    - a) registering the Unmanned Aircraft with the Lao DCA prior to commencement of operations,
    - b) obtaining flight clearance from the Air Traffic Services Provider in the controlled aerodromes and from Lao DCA in the other approved areas where the Unmanned Aircraft is operated in accordance with the requirements of this Regulation.

### 1.9. Insurance Cover

No person or organization may operate an Unmanned Aircraft without a valid Insurance Cover to the third party for the injury, damage, property or loss of life.

# 1.10. Accident and Incident Reporting

The person remotely operating the Unmanned Aircraft or the owner shall immediately report any occurrence of an accident or incident involving destruction of private or public property and any injury caused to the third party by any operation of Unmanned Aircraft to the nearest police station of the location of occurrence.

Report on the incident shall be submitted to Lao DCA by the owner/ the person remotely operated the Unmanned Aircraft at the earliest but not later than 48 hours of its occurrence.

The report should include the following information:

- 1) Name of the owner and contact information
- 2) Name of the operator and contact details
- 3) Registration details issued to pilot-less aircraft.
- 4) Location of the accident;
- 5) Date of the accident;
- 6) Time of the accident;
- 7) Person(s) injured and extent of injury, if any or known;
- 8) Property damaged and extent of damage, if any or known;
- 9) Description of what happened.

# Part 2 General Prohibitions on Unsafe Operations

# 2.1 Applicability of This Subpart

This Subpart applies to the operation of all unmanned aircraft and unmanned aerial activities that are not aircraft, whether or not any of 3 to 7 applies.

#### 2.2 Hazardous Operation Prohibited

- (1) A person must not operate an unmanned aircraft or other unmanned aerial activities in a way that creates a hazard to another aircraft, another person, or property.
- (2) A person must not launch a rocket or home-made rockets that is not an aircraft in a way that creates a hazard to an aircraft.
- (3) A person must not launch a rocket or home-made rockets that is not an aircraft in a way that creates a hazard to another person or to property.
- (3A) An offence against 2.2 (1), (2) or (3) is an offence of strict liability.
- (4) It is not a defense to a charge of contravening 2.2 (1), (2) or (3) that the relevant unmanned aircraft was being operated, or the relevant rocket or home-made was launched, in a way that complied with the operations manual approved by Lao DCA.
- (5) In 2.2 (2) and (3): *rocket* includes a firework rocket and home-made, regardless of whether it can rise more than 400 feet above ground level or not.

# Part 3 Provisions Applicable to Unmanned Aircraft Generally

# 3.1 Applicability of This Subpart

This Subpart applies to the operation of unmanned aircraft of all kinds, except operation mentioned in 1.1 (3).

*Note:* Rockets and home-made rockets that are not aircraft are dealt with separately in Part-7 (7.1).

#### 3.2 Operation in Prohibited or Restricted Area

(1) A person may operate an unmanned aircraft in or over a prohibited area, or in or over a restricted area, only with the permission of, and in accordance with any conditions imposed by, the organization controlling the area.

*Note:* Details of prohibited or restricted areas are published in the AIP or a NOTAM.

- (1A) An offence against 3.2 (1) is an offence of strict liability.
- (2) In 3.2 (1): organization controlling the area means:
  - (a) in the case of a prohibited area the Secretary to the Department of Defense; and
  - (b) in the case of a restricted area the organizations/entities mentioned in AIP (as issued from time to time) as the controlling organization for the area.
- (3) For 3.2 (1):
  - (a) the organization controlling the area must give a written statement of any condition so imposed to the person who applied for the permission; and
  - (b) unless the organization gives the statement to the person, the person is not bound by the condition.

# 3.3 Operation in Controlled Airspace

- (1) A person may operate an unmanned aircraft above 400 feet AGL in controlled airspace only:
  - (a) in an area approved under 1.4 as an area for the operation of unmanned aircraft of the same kind as the aircraft, and in accordance with any conditions of the approval; and
  - (b) in accordance with an air traffic control clearance.

*Note* AGL = above ground level.

(2) An offence against 3.3 (1) is an offence of strict liability.

#### 3.4 Operation Near Aerodromes

- (1) A person may operate an unmanned aircraft at an altitude above 400 feet AGL within 3 nautical miles of an aerodrome only if:
  - (a) the operation is permitted by another provision of this Part; or
  - (b) permission has been given for the operation under 3.5.

*Note* AGL = above ground level.

- (2) A person may operate an unmanned aircraft over an area mentioned in paragraph (3) (a) or (b) only if:
  - (a) the operation is permitted by another provision of this Part; or
  - (b) permission has been given for the operation under regulation 3.5.
- (3) The areas for 3.4(2) are:
  - (a) a movement area or runway of an aerodrome; and
  - (b) the approach or departure path of a runway of an aerodrome.
- (4) A person must not operate an unmanned aircraft in such a manner as to create an obstruction to an aircraft taking off from, or approaching for landing at, a landing area or a runway of an aerodrome.
- (5) An offence against 3.4 (1), (2) or (4) is an offence of strict liability.

#### 3.5 Permission for Operation of Unmanned Aircraft Near Aerodrome

- The authority from which permission must be obtained for the purposes of regulation 3.4 is:
  - (a) if the aerodrome concerned is a controlled aerodrome the air traffic control service for the aerodrome; or
  - (b) in the case of any other aerodrome Lao DCA.

(2) A person applies for permission under this regulation by giving to the relevant organizations mentioned in 3.5 (1) the information required by table 3.5, so far as relevant to the proposed operation.

### Table 3.5 Details of operation of unmanned aircraft to be given to Lao DCA or ATC

Item	Information to be provided		
1	In all cases:		
	<ul> <li>(a) the name, address and telephone number of the person who will operate the air-craft or (if the aircraft concerned is an unmanned free balloon) release the balloon/helium balloons (or, if several people will be involved, the name, address and telephone number of the person who will coordinate the operation); and</li> <li>(b) the date and time the operation or release is to begin and how long it is to last; and</li> <li>(c) where it is to be carried out; and</li> </ul>		
	<ul> <li>(d) if more than 1 unmanned aircraft is to be operated at a time, how many unmanned aircraft are to be operated at that time.</li> </ul>		
2	In the case of the operation of a tethered balloon or a kite: (a) a brief description of the balloon or kite, including its predominant color; and (b) the height to which it is to be operated; and (c) its mass		
3	<ul> <li>In the case of the release of a free balloon/helium balloons:</li> <li>(a) how many balloons are to be released; and</li> <li>(b) the estimated size and mass of the balloon's payload</li> </ul>		
4	<ul> <li>In the case of the release of a medium or heavy balloon:</li> <li>(a) the balloon's flight identification or its project code name; and</li> <li>(b) the balloon's classification, or a description of the balloon; and</li> <li>(c) the balloon's SSR code or NDB frequency; and</li> <li>(d) the expected horizontal direction of the balloon's ascent, and the balloon's expected rate of climb; and</li> <li>(e) the balloon's float level (given as pressure altitude); and</li> <li>(f) when the balloon is expected to reach 60 000 feet pressure altitude, and the location over which it is expected to do so; and</li> <li>(g) when the flight is expected to end, and where the balloon and its payload are expected to fall</li> </ul>		

#### Note: For free balloon and heavy balloon, see 7.4

For *tethered balloon*, see 7.3.

(3) If more than 1 aircraft is to be operated at a time, such a requirement is a requirement to give the information about each such aircraft.

- (4) 1.6 does not authorize a person who or that applies for permission under this regulation to make the application to a body mentioned in paragraph 1.5 (1) (a) or (b).
- (5) If the authority grants the permission, it may impose conditions on the permission in the interests of the safety of air navigation.
- (6) A person must not contravene a condition imposed under 3.5 (5).
- (7) An offence against 3.7 (6) is an offence of strict liability.

# 3.6 Maximum Operating Height

- (1) A person may operate an unmanned aircraft at above 400 feet AGL only:
  - (a) in an area approved under regulation 1.4 as an area for the operation of unmanned aircraft of the same class as the aircraft concerned, and in accordance with any conditions of the approval; or
  - (b) as otherwise permitted by this Part.

*Note* AGL = above ground level.

(2) An offence against 3.6 (1) is an offence of strict liability.

# 3.7 Dropping or Discharging of Things

- (1) A person must not cause a thing to be dropped or discharged from an unmanned aircraft in a way that creates a hazard to another aircraft, a person, or property.
- (2) An offence against 3.7 (1) is an offence of strict liability.

# 3.8 Weather and Day Limitations

- (1) A person may operate an unmanned aircraft:
  - (a) in or into cloud; or
  - (b) at night; or
  - (c) in conditions other than VMC;

only if permitted by another provision of this Part, or in accordance with an air traffic control direction.

(2) An offence against 3.8 (1) is an offence of strict liability.

# Part 4 UAVs

# 4.1 General

# 4.1.1 Applicability of This Subpart

- (1) This Subpart applies to:
  - (a) the operation of a large UAV; and
  - (b) the operation of a small UAV for purposes other than sport or recreation.

*Note 1:* There is no practicable distinction between a small UAV and a model aircraft except that of use — model aircraft are flown only for the sport of flying them.

Note 2: For large UAV and small UAV, see 4.1.2.

Note 3: For small UAV for the purpose of leisure, recreation and sport see Part 6.

- (2) Nothing in this Part applies to the operation of a UAV if:
  - (a) while it is being operated, the person operating it keeps it in sight; and
  - (b) it is operated in a way that complies with Part 5.
- (3) This Part does not apply to the operation of a micro UAV.

Note 1: See 1.1 (3).

Note 2: For micro UAV, see 4.1.2.

# 4.1.2 Definitions for Subpart

In this Part:

*approved area* means an area approved under regulation 1.4 as an area for the operation of UAVs.

*Note:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

certified UAV controller means a person certified under 4.3.

*controller* of a UAV means a person who performs a function that would be, if the UAV were a manned aircraft, a function of its flight crew.

large UAV means any of the following:

- (a) an unmanned airship with an envelope capacity greater than 100 cubic metres;
- (b) an unmanned powered parachute with a launch mass greater than 150 kilograms;
- (c) an unmanned aeroplane with a launch mass greater than 150 kilograms;
- (d) an unmanned rotorcraft with a launch mass greater than 100 kilograms;
- (e) an unmanned powered lift device with a launch mass greater than 100 kilograms.

micro UAV means a UAV with a gross weight of 100 grams or less.

*small UAV* means a UAV that is not a large UAV nor a micro UAV.

**UAV** means unmanned aircraft, other than a balloon or a kite.

# 4.2 Operation of UAVs Generally

#### 4.2.1 Operation Near People

- (1) Subject to 4.2.1 (2) and (3), a person must not operate a UAV within 30 meters of a person who is not directly associated with the operation of the UAV.
- (1A) An offence against 4.2.1(1) is an offence of strict liability.
- (2) 4.2.1 (1) does not apply in relation to a person who stands behind the UAV while it is taking off.
- (3) 4.2.1 (1) also does not prevent the operation of a UAV airship within 30 meters of a person if the airship approaches no closer to the person than 10 meters horizontally and 30 feet vertically.

#### 4.2.2 Where Small UAVs May Be Operated

- (1) A person may operate a small UAV outside an approved area only if:
  - (a) where the UAV is operated above 400 feet AGL, the operator has Lao DCA's approval to do so; and
  - (b) the UAV stays clear of populous areas.

*Note 1: AGL* = above ground level.

For *populous area*, see 1.4

For *small UAV*, see 4.1.2

*Note 2:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

Note 3: For the kinds of UAV operation to which this part does not apply, see 4.1.1

(2) An offence against 4.2.2 (1) is an offence of strict liability.

# 4.2.3 Large UAVs — Requirement for Certificate

(1) A person may operate a large UAV only if either a special certificate of airworthiness (restricted category), or an experimental certificate, has been issued for it under Lao Civil Aviation Safety Regulation (LCASR) Part 12 – Very Light, Ultra-Light Aircraft.

Note 1: For large UAV, see 4.1.2

*Note 2:* A large UAV is required to carry Certificate of Registration Card (CofRC) — see Lao Civil Aviation Safety Regulation (LCASR) Part 12 – Very Light, Ultra-Light Aircraft (12.4).

(2) An offence against 4.2.3 (1) is an offence of strict liability.

# 4.2.4 Maintenance of Large UAVs

(1) Lao Civil Aviation Safety Regulation (LCASR) Part 12 – Very Light and Ultra-Light Aircraft paragraph 12.3 applies to large UAVs.

Note: That is, a large UAV must be maintained as a Class B Aircraft.

(2) A person who carries out maintenance on a large UAV must comply with any directions given in writing by Lao DCA in relation to the maintenance of the UAV, or the maintenance of UAVs of a class that includes the UAV.

# 4.2.5 Operation of the Large UAVs

(1) A person may act as the controller of a large UAV that is a Lao aircraft if the person is certified as a UAV controller under 4.3.

*Note:* For the kinds of UAV operation to which this part does not apply, see regulation 4.1.1

- (2) For that paragraph, a person may perform any other duty that is essential to the operation of a large UAV that is a Lao aircraft even if the person does not hold the appropriate civil aviation authorization.
- (3) A person may carry out maintenance on:
  - (a) a large UAV that is a Lao aircraft; or
  - (b) an aircraft component for such a UAV; or
  - (c) aircraft material for such a UAV;

if the person:

- (d) holds an airworthiness authority that authorizes the maintenance; or
- (e) carries out the maintenance under the supervision of a person who holds such an authority.

#### 4.2.6 Requirement for UAV Operator's Certificate

- (1) A person may operate a UAV for hire or reward only if the person holds a UAV operator's certificate that authorizes the person to operate the UAV.
- (2) An offence against 4.2.6 (1) is an offence of strict liability.

#### 4.2.7 Approval of Operation of Large UAVs

- (1) A person may operate a large UAV only with Lao DCA's approval.
- (2) Lao DCA may impose conditions on an approval in the interests of the safety of air navigation.
- (3) For example, without limiting the generality of 4.2.7 (2), Lao DCA may impose conditions on an approval:
  - (a) prohibiting the operation of the relevant UAV at night or in conditions other than VMC; or
  - (b) restricting the extent to which the UAV may be operated at night or in conditions other than VMC; or
  - (c) requiring the UAV to stay within a specified area, or

- (d) requiring the operator to make specified broadcasts.
- (4) The operator of a UAV must comply with a condition of the approval of its operation.
- (5) If the person is certificated as an operator of large UAVs, and the proposed operation would not contravene any condition of the certification, Lao DCA must approve the proposed operation, but may impose conditions (including conditions mentioned in 4.2.7 (3)) on the approval.

Note: For certification as an operator of UAVs, see 4.4

(6) An offence against 4.2.7 (1) and (4) is an offence of strict liability.

#### 4.2.8 UAVs Not to Be Operated Over Populous Areas

(1) In this regulation:

*certificated UAV* means a UAV for which a certificate of airworthiness has been issued and still valid.

(2) A person must not operate a UAV that is not a certificated UAV over a populous area at a height less than the height from which, if any of its component fails, it would be able to clear the area.

Note 1: For **populous area**, see regulation 1.4.

For UAV, see regulation 4.1.2.

*Note 2:* For the kinds of UAV operation to which this part does not apply, see regulation 4.1.1.

- (3) Without the approval from Lao DCA, a person must not operate a certificated UAV over a populous area at a height less than the height from which, if any of its components fails, it would be able to clear the area.
- (3A) An offence against 4.2.8 (2) or (3) is an offence of strict liability.
- (4) In considering whether to give an approval under 4.2.8 (3), Lao DCA must take into account:
  - (a) the degree of redundancy in the UAV's critical systems; and
  - (b) any fail-safe design characteristics of the UAV; and
  - (c) the security of its communications and navigation systems.

(5) Before giving an approval under 4.2.8 (3), Lao DCA must be satisfied that the person who intends to operate the UAV will take proper precautions to prevent the proposed flight being dangerous to people and property.

#### 4.2.9 Use of Radiotelephone

- (1) A person may control a UAV in controlled airspace only if he or she:
  - (a) holds an aircraft radiotelephone operator's certificate of proficiency; and
  - (b) maintains a listening watch on a specified frequency or frequencies; and
  - (c) makes broadcasts on a specified frequency or frequencies at the specified interval giving the specified information.

Note: This part does not apply to the operation of micro UAVs— see 4.1.1 (3).

In 4.2.9 (1):

*specified frequency* for particular airspace means a frequency specified from time to time in AIP or by ATC as a frequency for use in the airspace.

*specified information* for particular airspace means information specified from time to time in AIP or by ATC as information that must be broadcast in the airspace.

*specified interval* for particular airspace means the interval specified from time to time in AIP or by ATC as the interval at which broadcasts must be made while in that airspace.

- (3) Lao DCA may direct that a particular person must not control a UAV unless the person:
  - (a) holds an aircraft radiotelephone operator's certificate of proficiency; and
  - (b) maintains a listening watch on a frequency or frequencies specified in the direction; and
  - (c) makes broadcasts:
    - (i) on a frequency or frequencies; and
    - (ii) at intervals; and
    - (iii) giving information specified in the direction.
- (4) The person must comply with the direction.

- (5) Lao DCA may direct, in regard to a particular UAV or type of UAV, that a person must not control the UAV, or a UAV of that type, unless he or she:
  - (a) holds an aircraft radiotelephone operator's certificate of proficiency; and
  - (b) maintains a listening watch on a frequency or frequencies specified in the direction; and
  - (c) makes broadcasts:
    - (i) on a frequency or frequencies; and
    - (ii) at intervals; and
    - (iii) giving information specified in the direction.
- (6) The person must comply with the direction.
- (7) An offence against 4.2.9 (1), (4) and (6) is an offence of strict liability.

# 4.3 Certification of UAV Controllers

### 4.3.1 Application for Certification as UAV Controller

- (1) An application for certification as a UAV controller must include the following information:
  - (a) details of any flight crew licence, air traffic control licence or flight service licence that the applicant holds (including details of ratings, endorsements and qualifications);
  - (b) details of any aeronautical experience that the applicant has;
  - (c) details of any aviation theory examinations the applicant has passed (other than any examination passed in the course of gaining a licence mentioned in paragraph (a));
  - (d) if the applicant does not hold a licence mentioned in paragraph (a), details of any flight radio operator's licence or radio operator's certificate of proficiency that the applicant holds;
  - (e) details of the applicant's experience in operating UAVs;
  - (f) evidence of the completion of any training course in UAV operation that the applicant has undertaken.

- (2) If Lao DCA reasonably needs more information about the applicant's qualifications and experience, or a document, to allow it to decide whether to certify the applicant as a UAV operator, it may ask the applicant in writing to give to it that information or a copy of that document.
- (3) Lao DCA may refuse to consider, or cease considering, the application until the applicant gives the information or copy to it.

#### 4.3.2 Eligibility for Certification as UAV Controller

- (1) Only an individual is eligible to be certificated as a UAV controller.
- (2) A person is eligible to be certificated as a UAV controller if he or she:
  - (a) qualifies for the issue of a radio operator's certificate of proficiency; and
  - (b) has been awarded a pass in an aviation licence theory examination (other than a flight radio operator's examination); and
  - (c) has been awarded a pass in an instrument rating theory examination; and
  - (d) has completed a training course in the operation of the type of UAV that he or she proposes to operate, conducted by the UAV's manufacturer; and
  - (e) has at least 5 hours experience in operating UAVs outside controlled airspace.
- (3) A person who holds or has held:
  - (a) a flight crew licence with a command instrument rating; or
  - (b) a military qualification equivalent to a licence and rating mentioned in paragraph (a); or
  - (c) an air traffic control licence, or a military qualification equivalent to an air traffic control licence; is taken to satisfy the conditions in paragraphs (2) (a), (b) and (c).

#### 4.3.3 Conditions on Certification as UAV Controller

- Lao DCA may impose a condition on the certification of a person as a UAV controller in the interests of the safety of air navigation.
- (2) For example (without limiting the generality of 4.3.3 (1)), a condition may:
  - (a) allow the person to control UAVs of only specified kinds; or

- (b) limit the areas where he or she may control UAVs; or
- (c) allow him or her to control UAVs only in VMC.
- (3) It is a condition of a UAV controller's certification that he or she must not operate a UAV in controlled airspace unless he or she holds an aircraft radiotelephone operator's certificate of proficiency.

#### 4.3.4 Certification as UAV Controller

- (1) If Lao DCA certifies a person as a UAV controller, Lao DCA may issue a certificate setting out the fact that the person is so certified.
- (2) If Lao DCA certifies a person as a UAV controller, and imposes a condition on the certification, Lao DCA must issue a certificate setting out the fact that the person is so certified, and the condition.

#### 4.3.5 How Long Controller's Certification Remains in Force

- (1) A UAV controller's certification remains in force until it is cancelled.
- (2) However, a UAV controller's certification is not in force during any period of suspension.

#### 4.3.6 Notice to Certified UAV Controller to Show Cause

- (1) Lao DCA may give a show cause notice to a certified UAV controller if there are reasonable grounds for believing that there are facts or circumstances that would justify the cancellation of the certification under regulation 4.3.7.
- (2) A show cause notice must:
  - (a) tell the controller of the facts and circumstances that, in Lao DCA's opinion, would justify the cancellation of the certification under regulation 4.3.7; and
  - (b) invite the controller to show in writing, within a reasonable time stated in the notice, why the certification should not be cancelled.
- (3) A show cause notice may state that the certification is suspended if Lao DCA reasonably considers that there may be a serious risk to the safety of air navigation if the certification were not suspended.
- (4) If a show cause notice states that the certification is suspended, the certification is suspended from when the notice is given to the holder.

- (5) Lao DCA may at any time revoke the suspension.
- (6) If the approval is suspended and Lao DCA has not dealt with it under regulation 4.3.7 within 90 days after the day it is suspended, the suspension lapses at the end of that period.

#### 4.3.7 Cancellation of UAV Controller's Certification

- (1) Lao DCA may cancel a certified UAV controller's certification by written notice to the controller, if:
  - (a) Lao DCA has given to the controller a show cause notice under regulation 4.3.6 in relation to it; and
  - (b) Lao DCA has taken into account any representations made, within the period stated in the notice, by or on behalf of the controller; and
  - (c) there are reasonable grounds for believing that the controller:
    - (i) has operated a UAV in contravention of this Regulation or of a condition of the certification; or
    - (ii) has operated the UAV negligently or carelessly; or
    - (iii) in operating the UAV, has recklessly endangered human life or property.
- (2) If Lao DCA has given a show cause notice under regulation 4.3.6 to a certified UAV controller, and it decides not to cancel the approval, it:
  - (a) must tell the controller in writing of the decision; and
  - (b) must, if the controller's certification is suspended under that regulation, revoke the suspension.

# 4.3.8 Cancellation at Request of Holder

- (1) Despite anything else in this regulation, Lao DCA must cancel a certified UAV controller's certification if asked to do so in writing by the controller.
- (2) The cancellation takes effect when the request is given to Lao DCA, or if a later day is stated in the request, on the later day.

# 4.4 UAV Operator Certificate

# 4.4.1 Application for Certification as UAV Operator

- (1) An application for certification as a UAV operator must include:
  - (a) details of:
    - (i) the applicant's structure and organization; and
    - (ii) its staff and their qualifications and experience (including, in particular, the names, qualifications, experience, duties and functions of the persons who are to be the applicant's chief UAV controller and maintenance controller); and
    - (iii) its facilities and equipment; and
    - (iv) its practices and procedures; and
  - (b) a general description of the proposed operations, including the type or types of UAV to be used.
- (2) The application must be accompanied by a copy of each of the applicant's manuals relevant to the operation of UAVs.
- (3) If Lao DCA reasonably needs more information about the applicant, or a document, to allow it to decide whether to certify the applicant as a UAV operator, it may ask the applicant in writing to give to it that information or a copy of that document.
- (4) Lao DCA may refuse to consider, or cease considering, the application until the applicant gives the information or copy to it.

# 4.4.2 Eligibility for Certification as UAV Operator

- (1) A person is eligible to be certificated as a UAV operator if:
  - (a) the person has an organization and structure that is appropriate for safe operation of UAVs; and
  - (b) the person has enough qualified and experienced personnel to undertake the proposed operations safely; and
  - (c) the person has facilities and equipment appropriate to carry out the proposed operations using UAVs of the type to be used; and

- (d) the person has suitable practices and procedures to do so; and
- (e) if necessary, the flight crew are certified as UAV controllers and hold flight radiotelephone operators' certificates of proficiency; and
- (f) the person has nominated suitable persons to be its chief UAV controller and maintenance controller.
- (2) A body that is not a legal person is not eligible to be certified as a UAV operator.
- (3) Two or more persons cannot be certified jointly as a UAV operator.

#### 4.4.3 Conditions on Certification

- (1) It is a condition of the certification of a person as a UAV operator that the person:
  - (a) maintains within its organization a position of chief UAV controller having at least the functions and duties of a chief controller;
  - (b) employs as its chief UAV controller a person who is certified as a UAV controller and who is competent to carry out those duties and perform those functions; and
  - (c) either:
    - (i) maintains a position within its organization of maintenance controller, with the functions and duties; or
    - (ii) has an arrangement with another qualified and competent person to carry out those functions and duties; and
  - (d) if it maintains within its organization a position of maintenance controller employs as its maintenance controller a person who is competent to carry out the duties and perform the functions of a maintenance controller.
- (2) If the UAV operator operates more than 1 UAV, the chief UAV controller must carry out the duties and functions of a chief UAV controller on a full-time basis.
- (3) Lao DCA may impose a condition on the certification of a person as a UAV operator in the interests of the safety of air navigation.
- (4) For example (without limiting 4.4.3 (3)), a condition may:
  - (a) allow the person to operate UAVs of only specified kinds; or

- (b) allow the person to operate UAVs only for specified purposes; or
- (c) limit the areas where the person may operate UAVs; or
- (d) allow the person to operate UAVs only in VMC.

### 4.4.4 Certification

- (1) If Lao DCA certifies a person as an operator of UAVs, Lao DCA may issue a certificate setting out the fact that the person is so certified.
- (2) If Lao DCA certifies a person as an operator of UAVs, and imposes a condition on the certification, Lao DCA must issue a certificate setting out the fact that the person is so certified, and the condition.

#### 4.4.5 How Long Operator's Certification Remains in Force

- (1) An operator's certification remains in force until it is cancelled.
- (2) However, an operator's certification is not in force during any period of suspension.

#### 4.4.6 Certification not Transferable

Certification as a UAV operator is not transferable.

#### 4.4.7 Notice to Certified UAV Operator to Show Cause

- (1) Lao DCA may give a show cause notice to a certified UAV operator if there are reasonable grounds for believing that there are facts or circumstances that would justify the cancellation of the approval under regulation 4.4.8.
- (2) A show cause notice must:
  - (a) tell the holder of the facts and circumstances that, in Lao DCA's opinion, would justify the cancellation of the certification under regulation 4.3.7; and
  - (b) invite the operator to show in writing, within a reasonable time stated in the notice, why the certification should not be cancelled.
- (3) A show cause notice may state that the certification is suspended if Lao DCA reasonably considers that there may be a serious risk to the safety of air navigation if the approval were not suspended.

- (4) If a show cause notice states that the certification is suspended, the certification is suspended from when the notice is given to the holder.
- (5) Lao DCA may at any time revoke the suspension.
- (6) If the approval is suspended and Lao DCA has not dealt with it under regulation 4.3.7 within 90 days after the day it is suspended, the suspension lapses at the end of that period.

# 4.4.8 Cancellation of UAV Operator's Certification

- (1) Lao DCA may cancel a certified UAV operator's certification by written notice to the operator, if:
  - (a) Lao DCA has given to the operator a show cause notice under regulation 4.3.6 in relation to it; and
  - (b) Lao DCA has taken into account any representations made, within the period stated in the notice, by or on behalf of the operator; and
  - (c) there are reasonable grounds for believing that:
    - (i) the operator has operated a UAV in contravention of this Regulation or of a condition of the certification; or
    - (ii) an employee of the operator has operated a UAV negligently or carelessly; or
    - (iii) an employee of the operator, in operating a UAV, has recklessly endangered human life or property.
- (2) If Lao DCA has given a show cause notice under regulation 4.3.6 to a certified UAV operator, and it decides not to cancel the approval, it:
  - (a) must tell the operator in writing of the decision; and
  - (b) must, if the operator's certification is suspended under that regulation, revoke the suspension.

# 4.4.9 Cancellation at Request of Holder

(1) Despite anything else in 4.4, Lao DCA must cancel a certified UAV operator's certification if asked to do so in writing by the operator.

(2) The cancellation takes effect when the request is given to Lao DCA, or if a later day is stated in the request, on the later day.

# 4.5 Types of UA Permits

# 4.5.1 Operator Permits

An Operator Permit is granted by Lao DCA to an applicant if the applicant is able to ensure safe operation of UA, taking into account the applicant's organisational set-up, competency of the personnel especially those flying the UA, procedures to manage safety including the conduct of safety risk assessments, and the airworthiness of each of the aircraft. The permit is valid for up to one year.

# 4.5.2 Activities Permits

An Activity Permit is granted by Lao DCA to an applicant for a single activity or a block of repeated activities to be carried out by an UA at a specific area of operation, and which are of specific operational profiles and conditions.

There are two types of activity permits:

- A Class 1 Activity Permit is required for UA activities conducted for purposes that are not recreational or research in nature; or if the UA to be used is over 7kg in total mass (including payload). A Class 1 Activity Permit is not valid without an UA Operator Permit.
- A Class 2 Activity Permit is required for UA activities conducted for recreational or research purposes, and which meets any of the following conditions:
  - Operating altitude higher than 200 ft (approx. 60 m) above ground level (AGL);
  - ↔ Within 5 km of a civil/military aerodrome, controlled airspace; or
  - Within any Restricted Area, Danger Area or Protected Area

Besides Lao DCA, there are other permits required from various agencies for certain aspects of the unmanned aircraft operation that come under their purview. This includes:

- Ministry of National Defense for aerial photography and/or overflight of security-sensitive locations
- > Ministry of Post and Telecommunication (MPT) for use of radio frequencies and power.
- Clearance for Manufacturing, Assembling, Importing, Exporting, Selling from appropriate governmental organizations.

# Part 5 Model Aircraft

# 5.1 Applicability of This Subpart

This subpart applies to the operation of model aircraft weighing 100 grams or more (except operation mentioned in paragraph 1.1 (3) (a) or (b)).

Note 1: For model aircraft.

*Note 2:* This Subpart does not apply to:

- (a) a control-line model aircraft (that is, a model aircraft that is constrained to fly in a circle, and is controlled in attitude and altitude, by means of inextensible wires attached to a handle held by the person operating the model); or
- (b) a model aircraft flown indoors. See 1.1 (3).

# 5.2 Definitions for This Subpart

In this subpart:

*approved area* means an area approved under regulation 1.5 as an area for the operation of model aircraft.

Note: AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

*giant model aircraft* means a model aircraft that has a take-off mass (excluding fuel) of more than 25 kilograms, but not more than 150 kilograms.

# 5.3 Visibility for Operation of Model Aircraft

- (1) A person may operate a model aircraft only if the visibility at the time is good enough for the person operating the model to be able to see it continuously.
- (2) An offence against 5.3 (1) is an offence of strict liability.

# 5.4 Operating Model Aircraft at Night

- (1) A person may operate a model aircraft at night only in accordance with the written procedures of approved by Lao DCA.
- (2) An offence against 5.4 (1) is an offence of strict liability.

#### 5.5 Keeping Model Aircraft Away from People

(1) A person must not operate a model aircraft over a populous area at a height less than the height from which, if any of its components fails, it would be able to clear the area.

#### Note: For populous area, see 1.3.

- (2) Subject to 5.5 (3) and (4), somebody who is operating a powered model aircraft must ensure that, while the model aircraft is in flight, or is landing or taking off, it stays at least 30 meters away from anyone not directly associated with the operation of model aircraft.
- (3) 5.5 (2) is not contravened if somebody stands behind the model aircraft while it is taking off.
- (4) 5.5 (2) is also not contravened if, as part of a model flying competition, a model aircraft is flown within 30 meters of somebody who is judging the competition.
- (5) An offence against 5.5 (1) and (2) is an offence of strict liability.

#### 5.6 Operation of Model Aircraft Outside Approved Areas

- (1) A person may operate a model aircraft outside an approved area above 400 feet AGL only if he or she:
  - (a) keeps it in sight; and
  - (b) keeps it clear of populous areas.

*Note 1: AGL* = above ground level.

For *populous area*, see regulation 1.3.

*Note 2:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

(2) An offence against 5.6 (1) is an offence of strict liability.

#### 5.7 Giant Model Aircraft

- (1) A person may operate a giant model aircraft only in accordance with:
  - (a) the rules and procedures of an approved aviation administration organization; or

(b) an approval given by Lao DCA.

Note: For giant model aircraft, see regulation 5.2.

- (2) Lao DCA may impose a condition on the operation of a giant model aircraft if the condition is reasonably necessary in the circumstances in the interests of aviation safety.
- (3) The operator of a giant model aircraft must comply with any condition imposed under 5.7 (2).
- (4) An offence against 5.7 (1) and (3) is an offence of strict liability.

# 5.8 Model Flying Displays

- A person may conduct a model aircraft flying display only in compliance with 5.8 (2) and (3).
- (1A) An offence against 5.8 (1) is an offence of strict liability.
- (2) A person complies with 5.8 if the display is conducted:
  - (a) in an approved area; and
  - (b) in accordance with the rules and procedures of an approved aviation administration organization.

*Note:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

- (3) A person complies with 5.8 if the display is conducted in accordance with the following conditions and any other conditions imposed by Lao DCA under 5.8 (4):
  - (a) at least 21 days before the display, somebody is nominated as the organizer of the display;
  - (b) at least 21 days before the display, he or she gives to Lao DCA the following information:
    - (i) his or her name, address and telephone number;
    - (ii) the proposed program of flying;
    - (iii) where the display will be held, and how big the intended flying field is;

(iv) how many spectators are expected, and where they will be;

(c) he or she ensures that:

- (i) having regard to the events making up the display, proper precautions are taken for the safety of the participants and spectators; and
- (ii) the operators participating in the display are competent to carry out each proposed maneuver safely.
- (4) Lao DCA may impose a condition on the conduct of a model flying display if in the circumstances the condition is reasonably necessary in the interests of aviation safety.

# Part 6 Drone Operations

# 6.1 Applicability of this subpart

This subpart applies to the operation of drone for the recreation/leisure/sport purpose.

## 6.2 Definitions

Drone Operator means an organization who will be operating the drone.

Drone Controller means a person who will be controlling the drone.

#### 6.3 General Requirements

A drone operator must comply with the requirements contained in Part 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, subpart 4 and the requirements specified below:

- a) Pre-operation:
  - 1) Check whether the drone and its controlling remote are in the appropriate and competent manner for the operation;
  - 2) Be authorized by the person controlling the area intending for the operation;
  - 3) Be familiarized with area intending for the operation and be briefed with the current weather.
  - 4) Be prepared for the emergency situation such as: supporting of first aids and the response when the drone is not within the responsibilities of control.
- b) Operating:
  - 1) All Drone weights over 1 kilogram should be registered with Lao DCA;
  - 2) A person must not operate a drone in a manner to be a hazard to another aircraft in flight;
  - A person must not operate a drone over an assembly of people (e.g. concerts, sporting events, parades) unless it is approved by the organizations holding that events and should complied with 6.3 b) to i), 1) to 13);
  - 4) A person must not operate a drone farther than 300 meters;
  - 5) A person must not operate a drone within 30 meters of any person, vessel, vehicle or structure not under your direct control;
  - 6) A person must not operate a drone closer than 5 kilometers from any aerodromes unless it is approved by Lao DCA;
  - 7) A person must not operate a drone in a negligent or reckless manner so as to endanger life or property of others;

- 8) A person must not operate a drone over 400 ft (120 m) above ground level;
- 9) A person must not operate a drone over urban areas such as villages, towns and cities unless it is approved by Lao DCA;
- 10) A person must not operate a drone in civil or military controlled airspace (e.g airspace surrounding airports) unless it is approved by concerned organization;
- 11) A person must not operate a drone in restricted areas (e.g. military installations or prisons) unless it is approved by concerned organization;
- 12) A person must not control a drone into/land/take-off in another person's private areas unless it is allowed by the landowner for take-off and landing;
- 13) A person must not control a drone outside of the controller direct line of sight.

Note 1: An offence against 6.3 is an offence of strict liability

Note 2: AIS Providers under the supervision of Lao DCA must publish details of approval and conditions in a NOTAM/aeronautical chart in accordance with 1.4 (5).

#### 6.4 Drone Controller Certification

- a) Drone Controller Certification in case of operating drone other than recreation, leisure and sport purpose.
  - 1) A person applying for Drone Controller Certificate to operate drone other than purpose recreation, leisure or sport purpose must comply with Part 4.3 and 4.4.
  - 2) An offence of 6.4, a) is an offence of a strict liability.
- b) Drone Controller Certification in case of operating drone for recreation, leisure and sport purpose.

A person applying for Drone Controller Certificate to operate a drone for recreation, leisure and sport purpose must comply with the following condition:

- 1) drone controller controlling drone weight under 2 kilograms
  - i. A person may operate a drone weights under 2 kilograms only that person is at least 18 years of age and be authorized by Lao DCA.
  - ii. Operate drone in accordance with the requirements specified in 6.3, a) and b)
  - iii. Lao DCA may impose conditions when necessary to ensure the safety for Air Navigation.

- 2) drone controller controlling drone weights under 25 Kilogram
  - i. A person may operate a drone weights under 25 kilograms only that person is complies with the requirements specified in 6.3, a) and b) and 6.4, b), 3) and 4);
  - ii. An offence against 6.4, b), 2) is an offence to the strict liability.
- 3) Eligibility of drone controller

A person may be eligible to control a drone for recreation, leisure and sport activities only when he/she meets the following requirements:

- 1) Be at least 18 years of age;
- 2) Be a good citizen;
- 3) Be in a good health; and
- 4) Never been in legal commission or in jail.
- Application for the Drone Controller Certification includes: An application for a Drone Controller Certification must be submitted to Lao DCA with the documents mentioned in table 6.4 below:

	Table 6.4	Information	to be	given to	Lao DCA
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Item	Information to be given to Lao DCA
1	A copy of Identification Card or Valid Passport
2	A copy of family book
3	Drone Model, Band, Number of drone, Manufacture's Plate, Operation Limitation and Equipment.
4	A copy of Insurance covering the third party.
5	Purpose of the operation.
6	Place where the drone be operated.
7	Name, address and phone number of the person operating the drone.
8	Letter to certify that the person operating the drone meets the requirements mention in 6.4, b), 3).
9	<ul> <li>Clearance from the Ministry of National Defense for aerial photography and/or overflight of security-sensitive locations</li> <li>Certificate for the use of radio frequencies and power from Ministry of Post and Telecommunication (MPT)</li> <li>Clearance for Manufacturing, Assembling, Importing, Exporting, Selling from appropriate governmental organizations.</li> </ul>

#### 6.5 The Drone Operation Permit

An applicant requesting to operate a drone must request for the Unmanned Vehicle Permit specified in Part 4.5 of this regulation. The application requesting for an operation of a drone is contained in the Appendix 8.

# Part 7 Unmanned Aerial Activities

# 7.1 Rockets and Home-made Rocket (Bang Fai)

# 7.1.1 Applicability of This Subpart

This Subpart applies to the operation of rockets of all kinds including home-made rocket (Bang Fai), except rockets mentioned in paragraph 1.1 (3) (f).

*Note 1:* That is, 7.1.1 does not apply to a firework rocket not capable of rising more than 400 feet above ground level. See 1.1 (3) (f).

Note 2: Rocket in this subpart does not include a rocket-powered aircraft — see 7.1.3.

# 7.1.2 Application of Lao Laws About Rockets

- (1) If a law of Laos deals with the operation or use of rockets, and is not inconsistent with this part, nothing in this part affects the operation of the law.
- (2) For 7.1.2 (1), a law of Laos is not inconsistent with this part if it is possible to comply with both this part and the Lao law at once.

# 7.1.3 Definitions for Subpart

In this Part:

*approved area* means an area approved under regulation 1.5 as an area for the operation of rockets.

*Note:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

*high power rocket* means a rocket that is not a model rocket, and, to avoid doubt, includes:

- (a) a sounding rocket; and
- (b) a sub-orbital rocket; and
- (c) a launch vehicle.

model rocket means a rocket that:

(a) weighs no more than 1 500 grams; and

- (b) carries no more than 125 grams of propellant; and
- (c) produces no more than 320 newton-seconds of impulse; and
- (d) is made of balsa, wood, paper or plastics or a combination of those materials, but contains no metal as structural parts.

**Home-made Rocket (Bang Fai):** Traditionally, home-made rockets are made by stuffing gunpowder into elaborately decorated bamboo. Today, many different materials are used, including plastic or metal piping. They come in a variety of sizes from very small to very large. Home-made rocket is usually released into airspace for a call for rain and a celebration of fertility.

Rocket: does not include a rocket-powered or rocket-assisted aircraft.

#### 7.1.4 Launching Rocket in or Over Prohibited or Restricted Area

(1) A person may launch a rocket (including a model rocket) in or over a prohibited area, or in or over a restricted area, only with the permission of, and in accordance with any conditions imposed by, the authority controlling the area.

*Note:* Details of prohibited or restricted areas are published in the AIP or a NOTAM.

(2) In 7.1.4 (1):

# authority controlling the area means:

- (a) in the case of a prohibited area— the Secretary to the Department of Defence; and
- (b) in the case of a restricted area the authority mentioned in AIP (as issued from time to time) as the controlling authority for the area.
- (3) An offence against 7.1.4 (1) is an offence of strict liability.

# 7.1.5 Launching Rockets into Controlled Airspace

- (1) A person may launch a rocket (including a model rocket) to higher than 400 feet AGL in controlled airspace only:
  - (a) in an approved area; or
  - (b) in accordance with an air traffic control clearance.

*Note 1: AGL* = above ground level.

*Note 2:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

(2) An offence against 7.1.5 (1) is an offence of strict liability.

#### 7.1.6 Launching Rockets Near Aerodromes

- (1) A person may launch a rocket that is not a small model rocket to higher than 400 feet AGL within 3 nautical miles of an aerodrome only if:
  - (a) doing so is permitted by another provision of this Part; or
  - (b) permission has been given for the operation under regulation 7.1.7.

*Note 1 AGL* = above ground level.

For *model rocket*, see regulation 8.3.

*Note 2:* Some special provisions apply to model rockets — see 7.1.12.

*(2)* In 7.1.6 (1):

small model rocket means a model rocket that weighs less than 500 grams and either:

- (a) uses no more than 25 grams of propellant; or
- (b) produces no more than 20 newton-seconds of impulse.
- (3) A person may launch a rocket (including both a small model rocket and any other model rocket) from or over an area mentioned in 7.1.6 (4) (a) or (b) only if:
  - (a) doing so is permitted by another provision of this Part; or
  - (b) permission has been given for the operation under regulation 7.1.7.
- (4) The areas for 7.1.6 (3) are:
  - (a) a movement area or runway of an aerodrome; and
  - (b) the approach or departure path of a runway of an aerodrome.
- (5) An offence against 7.1.6 (1) and (3) is an offence of strict liability.

#### 7.1.7 Getting Permission for Launch of Rocket Near Aerodrome

- (1) The authority that must give permission for 7.1.6 is:
  - (a) if the aerodrome concerned is a controlled aerodrome the air traffic control service for the aerodrome; or
  - (b) in the case of any other aerodrome Lao DCA.
- (2) A person applies for permission under this regulation by giving to the relevant authority mentioned in 7.1.7 (1) the information required by table 7.1.7, so far as relevant to the proposed launch:

#### Table 7.1.7 Details of launching of rocket to be given to Lao DCA

Item	Information to be provided
1	The name, address and telephone number of the person who will launch the rocket (or, if several people will be involved, the name, address and telephone number of the person who will coordinate the launching)
2	The date and time the rocket is to be launched
3	Where it is to be carried out
4	The size and mass of the rocket
5	The estimated greatest altitude or flight level that the rocket will reach
6	If more than 1 rocket is to be launched at a time, how many rockets are to be launched at the time

- (3) If more than 1 rocket is to be launched at a time, such requirement is a requirement to give the information about each such launch.
- (4) 1.5 does not authorize a person who or that applies for permission under this regulation to make the application to a body mentioned in paragraph 1.5 (1) (a) or (b).
- (5) An authority mentioned in 7.1.7 (1) may impose conditions on a permission in the interests of the safety of air navigation.
- (6) A person must not contravene a condition imposed under 7.1.7 (5).
- (7) An offence against 7.1.7 (6) is an offence of strict liability.

# 7.1.8 High Power Rockets

(1) A person may launch a high-power rocket, or permit a high power rocket to be launched, only in an approved area.

*Note 1:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

Note 2: For high power rocket, see 7.1.3.

(2) A person may launch a high power rocket, or permit a high power rocket to be launched, only if the person gives the details listed in the table following 7.1.7 (2) to Lao DCA at least 5 working day before the intended time of the launch.

*Note:* A person can comply with this requirement by telling:

- (a) if the person is an approved aviation administration organization—the NOTAM Office; or
- (b) the appropriate approved aviation administration organization. See 1.6.
- (3) If more than 1 rocket is to be launched at a time, such requirement is a requirement to give the information about each such rocket.
- (4) An offence against 7.1.8 (1) and (2) is an offence of strict liability.

#### 7.1.9 Maximum Operating Height of Rockets

- (1) A person may launch a rocket that is not a model rocket to higher than 400 feet AGL only:
  - (a) in an approved area; or
  - (b) as permitted by another provision of this Part.

*Note 1: AGL* = above ground level.

*Note 2:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

(2) An offence against 7.1.9 (1) is an offence of strict liability.

## 7.1.10 Dropping or Discharging of Things from Rockets

- (1) A person must not cause anything to be dropped or discharged from a rocket in a way that creates a hazard to an aircraft.
- (2) An offence against 7.1.10 (1) is an offence of strict liability.

#### 7.1.11 Weather and Day Limitations — Rockets Other Than Model Rockets

- (1) A person may launch a rocket that is not a model rocket:
  - (a) in or into cloud; or
  - (b) at night; or
  - (c) in conditions other than VMC;

only as permitted by another provision of this Part, or in accordance with an air traffic control clearance.

Note: For model rocket, see 7.1.3.

- (2) However, 7.1.11 (1) does not prevent rockets being operated as part of a firework display.
- (3) An offence against 7.1.11 (1) is an offence of strict liability.

#### 7.1.12 Model Rockets

(1) A person must not launch a model rocket into cloud.

Note: For *model rocket*, see 7.1.3.

- (2) A person must not launch a model rocket to higher than 400 feet AGL within 5 nautical miles of an aerodrome.
- (2A) An offence against 7.1.12 (1) and (2) is an offence of strict liability.
- (3) Subject to 7.1.12 (1) and (2) and Part 2, a person may launch a model rocket outside an approved area, or at night

# Part 7 Unmanned Aerial Activities

#### 7.2 Firework Display and Releasing of Sky Lanterns

#### 7.2.1 What This subpart Does

This subpart regulates the conduct of certain firework displays, to the extent necessary to prevent them being a hazard to the safety of air navigation.

## 7.2.2 Application of Lao Laws About Fireworks

- (1) If a law of Laos deals with the use of fireworks, and is not inconsistent with this Part, nothing in this Part affects the operation of the law.
- (2) For 7.2.2 (1), a law of Lao PDR is not inconsistent with this Part if it is possible to comply with both this Part and the Lao PDR law at once.

#### 7.2.3 Meaning of Operate a Firework Display

For this Part, a person **operates a firework display** if the person places the fireworks for the display, or fires them off.

A sky lantern, also known as "Wish Lantern", is an airborne paper lantern which derives in the air through heated air enclosed within the body of the lantern. Heat is usually generated through a small flame housed within the lantern. Sky lanterns are commonly released during Boat Racing Festival.

# 7.2.4 Certain Projectiles Prohibited in Firework Displays

- A person may use, in a firework display, a projectile that is capable of reaching more than 400 feet above ground level only if Lao DCA so approves.
- (2) An offence against 7.2.4 (1) is an offence of strict liability.

#### 7.2.5 Firework Displays Are Not Permitted Near Aerodromes

- A person may operate a firework display in or over an area mentioned in 7.2.5 (2) (a) or
   (b) only if 7.2.5 (3) or (4) applies to the display.
- (1A) An offence against 7.2.5 (1) is an offence of strict liability.
- (2) The areas for 7.2.5 (1) are:
  - (a) a movement area or runway of an aerodrome; and
  - (b) the approach or departure path of a runway of an aerodrome.

- (3) This regulation applies to a firework display if:
  - (a) permission for the display has been given by:
    - (i) if the aerodrome is a controlled aerodrome the air traffic control service for the aerodrome; and
    - (ii) in the case of any other aerodrome Lao DCA; and
  - (b) the person who proposes to operate the display has, before doing so, given to Lao DCA the details required by table 7.2.6.
- (4) This Part applies to a firework display if the fireworks are set off on or near domestic premises by or for somebody who lives there.

#### 7.2.6 Notice to Lao DCA of Certain Firework Displays

- (1) A person may operate a firework display at a place within 3 nautical miles of an aerodrome only if the person has given at least 5 working days' notice to Lao DCA.
- (2) However, 7.2.6 (1) does not apply if:
  - (a) the fireworks are set off on or near domestic premises by or for somebody who lives there; and
  - (b) either:
    - (i) if a law of Lao PDR allows fireworks to be set off in that place only on a particular day or days — the fireworks are set off on such a day; or
    - (ii) if there is no such law in that place the fireworks are set off on a day on which fireworks are customarily set off on domestic premises in that place.

When the person tells Lao DCA, the person must also give to Lao DCA the information required by table 7.2.6.

Item	Information to be given to Lao DCA
1	The name, address and telephone number of the person who will operate the display (or, if several people will be involved in its operation, the name, address and telephone number of the person who will coordinate it)
2	The date the display is to begin, the starting time, and how long it is to last
3	Where it is to be given
4	How many projectiles capable of reaching more than 400 feet above ground level are to be used in the display
5	A general description of the pyrotechnic characteristics of each such projectile
6	The estimated highest altitude that any projectile can reach
7	The maximum burst radius of the pyrotechnics in a projectile

# Table 7.2.6 Details of firework display to be given to Lao DCA

- (4) Lao DCA may impose a condition on the operation of a firework display if the condition is reasonably necessary in the circumstances in the interests of the safety of air navigation.
- (5) A person operating a display must comply with any condition imposed under 7.2.6 (4).
- (6) An offence against 7.2.6 (1) and (5) is an offence of strict liability.

# 7.2.7 Releasing of Sky Lanterns

The release of sky lanterns is strictly prohibited according to the the operating hours of military activities. Furthermore, the sky lanterns should not be released within these limits without a permit:

- ✤ Within 5km of an airport/airbase
- Higher than 200 feet AGL (above ground level) outside 5km of an airport/airbase
- It is required to submit a notification to Lao DCA when planning to release sky lanterns within the area and height limits.

A permit is required from Lao DCA when releasing sky lanterns outside the area and height limits. Applications will be assessed on a case-by-case basis. It will take 7 working days to process the application, as assessment will be conducted in consultation with the Ministry of National Defense in order to obtain clearance. The Application requesting for the release of sky lanterns must give the Lao DCA the information contained in the table 7.2.7.

Item	Information to be given to Lao DCA
1	The name, address and telephone number of the person who will release (or, if several people will be involved in its releasing, the name, address and telephone number of the person who will coordinate it)
2	Number of sky lanterns to be released
3	The date and time the sky lantern is to be released
4	Where it is to be carried out
5	The size and mass of the sky lanterns
6	The estimated greatest altitude or flight level that the sky lantern will reach
7	If more than 1 sky lantern is to be released at a time, how many sky lanters are to be launched at the time

# Part 7 Unmanned Aerial Activities

# 7.3 Tethered Balloons and Kites

## 7.3.1 Applicability of This subpart

This subpart applies to the operation of tethered balloons and kites.

*Note:* This subpart does not apply to:

- (a) the shielded operation (that is, operation within 100 meters of a structure and not above the top of the structure) of a small balloon; or
- (b) the operation of an unmanned tethered balloon or kite below 400 feet AGL. See 1.1 (3).

# 7.3.2 Definitions for This Part

(1) In this Part:

*tethered balloon* means a balloon that is attached to the ground, or an object on the ground, by a cable.

(2) For this Part, the height of a tethered balloon is taken to be the height above ground level of the topmost part of its envelope.

# 7.3.3 Flying Kites

A kit may distract pilots during certain stages of flight if flown near an airport or airbase (such as takeoff or landing path) and/or be ingested by aircraft engines. This may endanger lives and cause harm to the property – in the air and on the ground.

Kite flying must not be conducted within these limits without a permit:

- ➢ Within 5km of an airport/airbase.
- > Outside 5km of an airport/airbase, but higher than 200 feet above ground level.
- > Higher than 500 feet above mean sea level in any other place

There is no need to submit a notification to Lao DCA. If there is no plan to fly a kite within the area and height limits.

A permit to fly kites is required from Lao DCA when conducted outside the area and height limits. Applications will be assessed on a case-by-case basis. It will take 7 working days to process the application, as assessment will be conducted in consultation with the Ministry of National Defense.

#### 7.3.4 Tethered Balloons and Kites That May Be Operated Outside Approved Areas

- (1) A person may operate a tethered balloon or a kite above 400 feet AGL outside an area approved under regulation 1.4 as an area for the operation of unmanned balloons or kites (as the case requires) only if:
  - (a) the mass of the balloon or kite is no more than 15 kilograms; and
  - (b) the horizontal visibility at the time is at least 5 kilometers; and
  - (c) the person gives to Lao DCA the information required by table 7.3.4 about the proposed operation at least 1 working day before it is due to start.

*Note 1:* A person can comply with this requirement by telling:

- (a) if the person is an approved aviation administration organization— the NOTAM Office; or
- (b) the appropriate approved aviation administration organization. See regulation 1.5.

*Note 2:* AIS Providers under Lao DCA supervision must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

- (1A) An offence against 7.3.4 (1) is an offence of strict liability.
- (2) If more than 1 tethered balloon or kite is to be operated at a time, such a requirement is a requirement to give the information about each such balloon or kite.

# Table 7.3.4 Details of operation of tethered balloon or kite to be given to Lao DCA

Item	Information to be provided
1	The name, address and telephone number of the person who will operate the balloon or kite (or, if several people will be involved, the name, address and telephone number of the person who will coordinate the operation)
2	The date and time the operation is to begin, and how long it is to last
3	Where it is to be carried out
4	A brief description of the balloon or kite, including its predominant color
5	The height to which it is to be operated
6	Its mass
7	If more than 1 tethered balloon or kite is to be operated at a time, how many tethered
	balloons or kites are to be operated at the time

## 7.3.5 Mooring-Line Marking

- (1) A person may operate a tethered balloon only if
  - (a) each mooring line has colored streamers attached at intervals of no more than 15 meters along it, with the first streamer no more than 150 feet above ground level; and
  - (b) the streamers would be visible in normal daylight for at least 1.5 kilometers.
- (2) An offence against 7.3.5 (1) is an offence of strict liability.

#### 7.3.6 Operation of Tethered Balloon or Kite Under Cloud

(1) A person may operate a tethered balloon or kite under cloud only if he or she keeps the balloon or kite at least 500 feet (measured vertically) below the cloud.

Note: For tethered balloon, see 7.3.2.

(2) An offence against 7.3.6 (1) is an offence of strict liability.

#### 7.3.7 Tethered Balloon to Be Lit at Night

- (1) A person may operate a tethered balloon at night at or above 400 feet AGL only if it is lit so as to be visible in VMC from at least 4 kilometers away.
- (1A) An offence against 7.3.7 (1) is an offence of strict liability.
- (2) The lighting required by 7.3.7 (1) may be inside the balloon, on its outside, or on the ground.

#### 7.3.8 Rapid Deflation Device Required

- (1) A person may operate a tethered balloon only if it is fitted with a device that will cause it to deflate rapidly and completely if it escapes from its mooring.
- (2) An offence against 7.3.7 (1) is an offence of strict liability.

#### 7.3.9 What to Do if Tethered Balloon Escapes

- (1) If a tethered balloon escapes from its mooring, and the deflation device does not cause it to deflate, the person operating it must tell Lao DCA as soon as possible:
  - (a) where the balloon was launched; and

- (b) what time it broke free; and
- (c) the direction it was headed when last seen.
- (2) An offence against 7.3.9 (1) is an offence of strict liability.

# Part 7 Unmanned Aerial Activities

# 7.4 Unmanned Free Balloons/Free-Flying Helium Balloons

# 7.4.1 Applicability of This subpart

This subpart applies to the operation of an unmanned free balloons/free-flying helium balloons.

#### 7.4.2 Definitions for This Subpart — Free Balloons

(1) For this part:

free balloon means an unmanned balloon that is not tethered.

**helium balloon** means a pilotless object without propulsion in free flight. It stays in the air as it is filled with helium, which is lighter than air. Helium-filled balloons move freely through the air depending on the winds.

- (2) There are 4 kinds of free balloon: *small balloon*, *light balloon*, *medium balloon* and *heavy balloon*.
- (3) In this part:

*small balloon* means a free balloon that can carry no more than 50 grams of payload.

Note: helium balloon is classified as a small balloon

(4) In this part:

light balloon means a free balloon that:

- a) is no more than 2 meters in diameter at any time during its flight; and
- b) can carry no more than 4 kilograms of payload.
- (5) In this part:

#### medium balloon means a free balloon that:

- a) may be more than 2 meters in diameter at some time in its flight; and
- b) is capable of carrying more than 4 kilograms, but no more than 6 kilograms, of payload.

(6) In this part:

heavy balloon means a free balloon capable of carrying more than 6 kilograms of payload.

#### 7.4.3 Definition for part — *approved area*

In this part:

**approved area** means an area approved under regulation 1.4 as an area for the operation or release of unmanned free balloons.

*Note:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

# 7.4.4 Releasing Helium Balloons

When released, the free-flying helium-filled balloons may drift far from the point of release to areas and heights that may affect aircraft operations. Large clusters of free-flying helium-filled balloons may distract pilots during critical stages of flight (such as take-off or landing) and/or be ingested by aircraft engines. This may in turn endanger lives and cause harm to the property – in the air and on the ground.

The release of free-flying helium balloons is strictly prohibited during the operating hours of military airbases/activities. In addition, free-flying helium balloons should not be released within 5km of an airport or airbase without a permit. Balloons, individually or as a cluster, should not exceed 2 metres in any linear dimension.

It is required to submit a notification to Lao DCA when planning to release free-flying helium balloons within the area and height limits.

A permit is required from Lao DCA when releasing free-flying helium balloons outside the area and height limits. Applications will be assessed on a case-by-case basis. It will take 7 working days to process application submitted by the applicant, as assessment will be conducted in consultation with the Ministry of National Defense. The applicant requesting for the release of a helium balloon must give the Lao DCA the information specified in the table 7.4.4-2.

(1) A person may release a small balloon/helium balloon only if the person has first complied with any requirements as to approval or notice set out in table 7.4.4.

Note: For small balloon, see 7.4.2 (3).

- (1A) An offence against 7.4.4 (1) is an offence of strict liability.
- (2) 7.4.4 (1) does not apply if no more than 100 helium balloons are to be released at once.

ltem	Number of	Distance from place of release to nearest aerodrome			
	balloons to be released at once	less than 3 nautical miles	3–6 nautical miles	6–12 nautical miles	over 12 nautical miles
1	101–1000	approval required	NOTAM	no approval required	no approval required
2	1001–10000	approval required	approval required	NOTAM	no approval required
3	Over 10000	approval required	approval required	approval required	NOTAM

Table 7.4.4-1 Requirements for release of helium balloons

(3) In the table, for a combination of a number of helium balloons to be released and a distance to an aerodrome:

*approval required* means that an approval under 7.4.4 (4) is required for the release of that number of balloons at a place within that distance from the nearest aerodrome.

*no approval required* means that no such approval is required for the release of that number of balloons at a place within that distance from the nearest aerodrome.

**NOTAM** means that Lao DCA's approval is not required, but the person intending to release that number of balloons at a place that distance from the nearest aerodrome must give to Lao DCA the information about the proposed release required by table 7.4.4-2.

Item	Information to be provided
1	The name, address and telephone number of the person who will release the balloons (or, if several people will be involved, the name, address and telephone number of the person who will coordinate the release)
2	The date and time the release is to begin, and how long it will take
3	Where it is to be carried out
4	How many balloons are to be released
5	The estimated size and mass of any payload

Note: Lao DCA will give the notification to the NOTAM office about the release.

(4) If approval is required under 7.4.4 to release small balloons, Lao DCA must grant the approval unless the proposed release would present an unacceptable hazard to aviation.

#### 7.4.5 Light Balloons That May Be Released Outside Approved Areas

(1) A person may release a light balloon outside an approved area only if the person gives to Lao DCA the information required by table 7.4.5 at least 1 working day before the proposed release.

*Note 1:* A person can comply with this requirement by telling:

- (a) if the person is an approved aviation administration organization— the NOTAM Office; or
- (b) the appropriate approved aviation administration organization. See 1.5.

*Note 2:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

Note 3: For light balloon, see 7.4.2 (4).

- (1A) An offence against 7.4.5 (1) is an offence of strict liability.
- (2) If more than 1 balloon is to be released at a time, such a requirement is a requirement to give the information about each such balloon.

# Table 7.4.5 Details of release of light balloon to be given to Lao DCA

ltem	Information to be provided
1	The name, address and telephone number of the person who will release the balloon (or, if several people will be involved, the name, address and telephone number of the person who will coordinate the release)
2	The date and time the release is to begin
3	Where it is to be carried out
4	The estimated size and mass of the balloon's payload
5	If more than 1 balloon is to be released at a time, how many balloons are to be released at the time

- (3) 7.4.5 (1) does not require the Department of Methodology and Hydrology to give notice of the proposed release of a light balloon if:
  - (a) the release is part of the Department of Methodology and Hydrology's normal meteorological procedures; and
  - (b) the release location has been notified in AIP or NOTAM.

#### 7.4.6 Release of Medium and Heavy Balloons Outside Approved Areas

(1) Subject to 7.4.5 (3), a person may release a medium or heavy balloon outside an approved area only if the person gives to Lao DCA the information required by table 7.4.6 at least 5 working days before the proposed release.

*Note 1:* A person can comply with this requirement by telling:

- (a) if the person is an approved aviation governmental organization— the NOTAM Office; or
- (b) the appropriate approved aviation governmental organization. See 1.5.

*Note 2:* AIS Providers under the supervision of Lao DCA must publish details of the approval of an area (including any conditions) in NOTAM or on an aeronautical chart — see 1.4 (5).

Note 3: For heavy balloon and medium balloon, see regulation 7.4.2.

(2) If more than 1 balloon is to be operated at a time, such a requirement is a requirement to give the information about each such balloon.

# Table 7.4.6 Details of release of medium or heavy balloon to be given to Lao DCA

Item	Information to be provided
1	The name, address and telephone number of the person who will release the balloon (or, if several people will be involved, the name, address and telephone number of the person who will coordinate the release)
2	The date and time the release is to begin
3	Where it is to be carried out
4	The estimated size and mass of the balloon's payload
5	The balloon's flight identification or the project code name
6	The balloon's classification, or a description of the balloon

7	The balloon's SSR code or NDB frequency
8	The expected horizontal direction of the balloon's ascent, and the balloon's expected rate of climb
9	The balloon's planned float level (given as pressure altitude)
10	The time the balloon is expected to reach 60 000 feet pressure altitude, and the location over which it is expected to do so
11	The time the flight is expected to end, and where the balloon and its payload are expected to fall
12	If more than 1 balloon is to be released at a time, how many balloons are to be released at the time

- 3) 7.4.6 (1) does not require the Department of Methodology and Hydrology to give notice of the proposed release of a medium balloon if:
  - (a) the release is part of the Department of Methodology and Hydrology's normal meteorological procedures; and
  - (b) the release location has been notified in AIP or NOTAM.

Subject to 7.4.6 (5), the person must also confirm the details of the proposed release to the air traffic control service that has responsibility for the airspace within which the balloon will be released no later than the earlier of:

- (a) 6 hours before the expected release time; or
- (b) the time the balloon begins to be inflated.
- (4A) An offence against 7.4.6 (1) and (4) is an offence of strict liability.
- (5) 7.4.6 (4) does not require the Department of Methodology and Hydrology to confirm the details of the release of a medium balloon with an air traffic control service if:
  - (a) the release is part of the Department of Methodology and Hydrology's normal meteorological procedures; and
  - (b) the release location has been notified in AIP or NOTAM.

## 7.4.7 Medium and Heavy Balloons Not to Be Flown Low

(1) A person who is operating a medium or heavy balloon must not allow it to go below 3 000 feet AGL while it is over a populous area.

*Note* **AGL** = above ground level.

For *heavy balloon* and *medium balloon*, see 7.4.2.

For *populous area*, see regulation 1.3.

(2) An offence against 7.4.7 (1) is an offence of strict liability.

#### 7.4.8 Medium and Heavy Balloons to Be Flown in Clear Sky

 Subject to 7.4.8 (3) and (4), a person must not operate a medium or heavy balloon below 60 000 feet pressure altitude if, at the altitude at which the balloon is being operated, the horizontal visibility is less than 8 kilometers.

#### *Note:* For *heavy balloon* and *medium balloon*, see 7.4.2.

- (2) Subject to 7.4.8 (3) and (4), a person who is operating a medium or heavy balloon must not allow it to remain at an altitude below 60 000 feet pressure altitude at which cloud, fog or mist obscures more than half the sky.
- (2A) An offence against 7.4.8 (1) and (2) is an offence of strict liability.
- (3) 7.4.8 (1) and (2) do not apply to operation outside controlled airspace if Lao DCA approves the operation and the operation is carried out in accordance with the approval.
- (4) Those sub-regulations also do not apply to operation in controlled airspace in accordance with an air traffic control clearance.

#### 7.4.9 How Payload Must Be Supported — Medium and Heavy Balloons

(1) A person may operate a medium or heavy balloon only if the means by which the payload is attached to the balloon can support at least 10 times the mass of the payload.

# Note: For heavy balloon and medium balloon, see 7.4.2.

(2) An offence against 7.4.9 (1) is an offence of strict liability.

#### 7.4.10 Equipment That Must Be Carried — Medium and Heavy Balloons

- (1) A person may operate a medium or heavy balloon only if:
  - (a) the balloon is fitted with at least 2 independent ways (either automatic or remotelyoperated) of releasing its payload; and
  - (b) if the balloon is not a zero-pressure balloon, it has at least 2 independent ways of ending the flight of the balloon envelope; and
  - (c) either:
    - the balloon envelope carries a radar reflector, or radar-reflective material, that will return an echo to a surface radar operating in the frequency range 200 megahertz to 2 700 megahertz; or
    - (ii) the balloon is fitted with a device to allow it to be continuously tracked by the operator beyond the range of ground-based radar; and
  - (d) if the balloon is operated in an area in which ground-based secondary surveillance radar is in use, it is fitted with an SSR transponder (with altitude-reporting capability) that either operates continuously or can be turned on by the operator if an air traffic control service so requires.
- (2) An offence against 7.4.10 (1) is an offence of strict liability.

# 7.4.11 Lighting — Medium and Heavy Balloons

(1) A person may operate a medium or heavy balloon below 60 000 feet pressure altitude at night only if both the balloon and its payload are lit (whether or not they become separated during the operation) so as to be visible, under the prevailing conditions, for at least 4 kilometers in all directions.

#### Note: For heavy balloon and medium balloon, see 7.4.2.

- (2) For 7.4.11 (1), a balloon is being operated at night if the sun is below the balloon's horizon.
- (3) An offence against 7.4.11 (1) is an offence of strict liability.

#### 7.4.12 Marking — Free Balloons Generally

- (1) A person may operate a free balloon that carries a trailing antenna that requires a force of more than 230 newtons to break it only if the antenna has colored streamers or pennants attached to it every 15 meters.
- (2) A person may operate a free balloon that carries a payload only if the payload has fixed to it a durable identification plate carrying sufficient information:
  - (a) to identify the payload; and
  - (b) to enable somebody who finds the payload to contact the person who released the balloon.

Note: For free balloon, see 7.4.2.

(3) 7.4.12 (2) does not apply to a light or medium balloon operated by the Department of Methodology and Hydrology.

Note: For light balloon and medium balloon, see 7.4.2.

(4) An offence against 7.4.12 (1) and (2) is an offence of strict liability.

# 7.4.13 Marking by Day — Heavy Balloons

- (1) A person may operate a heavy balloon (being a heavy balloon that has its payload suspended more than 15 meters below the envelope) above 60 000 feet pressure altitude by day only if:
  - (a) the payload's suspension is colored in alternate bands of conspicuous colors, or has colored pennants attached to it; or
  - (b) the balloon has a conspicuous payload-recovery parachute suspended under the envelope, or the balloon is suspended beneath a conspicuous open parachute.

Note: For *heavy balloon*, see 7.4.2 (6).

- (2) For 7.4.13 (1), a balloon is being operated by day if the sun is above the balloon's horizon.
- (3) An offence against 7.4.13 (1) is an offence of strict liability.

# 7.4.14 Lighting by Night — Heavy Balloons

(1) A person may operate a heavy balloon above 60 000 feet pressure altitude at night only if it is lit so as to be visible in VMC from at least 4 kilometers away.

Note: For heavy balloon, see 7.4.2 (6).

- (2) For 7.4.14 (1), a balloon is being operated at night if the sun is below the balloon's horizon.
- (3) The lighting required by 7.4.14 (1) may be inside the balloon or on its outside.
- (4) An offence against 7.4.14 (1) is an offence of strict liability.

#### 7.4.15 Obligation to Stay in Communication with ATC — Medium and Heavy Balloons

(1) The operator of a medium or heavy balloon must establish and maintain communication with the relevant air traffic control service from the time the balloon begins to be inflated until the flight ends.

#### Note: For heavy balloon and medium balloon, see 7.4.2.

- (2) The operator must tell the relevant air traffic control service at least 1 hour before the balloon is launched.
- (3) An offence against 7.4.15 (1) and (2) is an offence of strict liability.

## 7.4.16 Tracking of Flight — Medium and Heavy Balloons

(1) The operator of a medium or heavy balloon must track its flight continuously.

#### Note: For heavy balloon and medium balloon, see 7.4.2.

- (2) While the balloon is below 60 000 feet pressure altitude, if it cannot be tracked visually from the ground or by radar, the operator must ensure that a tracking aircraft accompanies it continuously.
- (3) An offence against 7.4.16 (1) and (2) is an offence of strict liability.

#### 7.4.17 Flight Reporting — Medium and Heavy Balloons

- (1) The operator of a medium or heavy balloon must report the progress of the balloon's flight to the relevant air traffic control service as follows:
  - (a) the operator must tell the service immediately when the balloon is released;
  - (b) the operator must tell the service when the balloon leaves each 10 000-foot level up to 60 000 feet (pressure altitude);

- (c) the operator must report the balloon's position to the relevant air traffic control service periodically, as follows:
  - (i) when required to do so by the service;
  - (ii) while the balloon is below 60 000 feet pressure altitude every 10 minutes;
  - (iii) while the balloon is at or above 60 000 feet pressure altitude every 2 hours;
- (d) if the operator loses the balloon's position, the operator must tell the service immediately that tracking has been lost and the balloon's last known position;
- (e) after having re-established tracking of the balloon, the operator must tell the service immediately that tracking has been re-established and the balloon's position at that time.

# Note: For *heavy balloon* and *medium balloon*, see 7.4.2.

- (2) If the balloon is being accompanied by a tracking aircraft, the operator must ensure that the crew of the aircraft maintains continuous 2-way communication with the relevant air traffic control service.
- (2A) An offence against 7.4.17 (1) and (2) is an offence of strict liability.
- (3) A reference in this regulation to the relevant air traffic control service is to be read, at a particular time, as a reference to the air traffic control service that is responsible for the airspace in which the balloon is located at the time.

# 7.4.18 Ending Flight and Recovery — Medium and Heavy Balloons

- (1) The operator of a medium or heavy balloon must give to the relevant air traffic control service at least 1 hour's notice of the time the flight is planned to end, and when doing so must also give to the air traffic control service the following information:
  - (a) the balloon's current position and altitude;
  - (b) the estimated time at which, and the estimated location over which, the balloon will pass through 60 000 feet pressure altitude during its descent;
  - (c) the estimated time when, and place where, the payload will fall.

Note: For heavy balloon and medium balloon, see 7.4.2.

- (2) The operator may command the balloon to end its flight only:
  - (a) in an emergency; or
  - (b) if cleared to do so by the relevant air traffic control service.
- (3) If the operator commands the balloon to end its flight when not cleared by air traffic control to do so, the operator must tell the relevant air traffic control service immediately, and when doing so must also give to it the following information:
  - (a) the balloon's current position and altitude;
  - (b) the estimated time when and place where the payload will fall.
- (4) The operator must tell the relevant air traffic control service as soon as possible after the balloon's payload falls.
- (4A) An offence against 7.4.18 (1), (2), (3) and (4) is an offence of strict liability.
- (5) A reference in this regulation to the relevant air traffic control service is to be read, at a particular time, as a reference to the air traffic control service that is responsible for the airspace in which the balloon is located at the time.

# 7.4.19 Direction by ATC to End Flight in Certain Circumstances

- (1) If a balloon is in controlled airspace and an air traffic control service considers that it poses a hazard to other aircraft, or to people or property on the ground, that service may direct the balloon's operator to end the balloon's flight immediately.
- (2) The operator must comply with the direction by ending the balloon's flight by the fastest possible method.
- (3) An offence against 7.4.19 (2) is an offence of strict liability.

# APPENDIX 1 DRONE SAFETY OPERATION PROMOTION BROCHURE



# APPENDIX 2: ILLUSTRATED IMAGES FOR UAVS, BALLOON, KITE, ROCKET, FIREWORK AND DRONE



# Airship



# **Unmanned Powered Parachute**



# **Unmanned Rotorcraft**



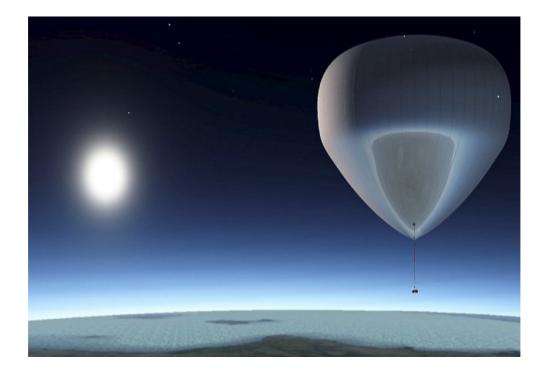
Unmanned Aero plane



Tethered Balloon



Small Balloon



# Free Balloon



Rocket



Home-made Rocket



**Firework Rocket** 



Drone



Kite



Meteorological Balloon



Firework



## Helium Balloons



Sky Lanterns

#### **APPENDIX 3 APPLICATION FOR AN UAV CONTROLLER LICENCE**

# Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION FOR AN UAV CONTROLLER LICENCE

Name/Surname:	Workplace	
	Tel/Mob:	
Date of Birth	ID Card No/Passport	
Eligibility	-	
details of any aeronautical experience that the		
applicant has;		
qualifies for the issue of a radio operator's		
certificate of proficiency; and		
has been awarded a pass in an aviation licence		
theory examination (other than a flight radio		
operator's examination); and		
has been awarded a pass in an instrument rating		
theory examination; and		
has completed a training course in the operation		
of the type of UAV that he or she proposes to		
operate, conducted by the UAV's manufacturer;		
and		
has at least 5 hours experience in operating		
UAVs outside controlled airspace.		
Or has completed:		
a flight crew licence with a command instrument		
rating; or		
a military qualification equivalent to a licence and		
rating; or		
an air traffic control licence, or a military		
qualification equivalent to an air traffic control		
licence; is taken to satisfy the conditions in		
paragraphs (2) (a), (b) and (c) in the LCASR Part		
17, Part 4.3.2.		
Documents to be submitted		
		Please Check and
		attach the
		evidence

details of any flight crew licence, air traffic control licence or flight service licence that the applicant holds (including details of ratings, endorsements and qualifications);	
details of any aviation theory examinations the applicant has passed	
(other than any examination passed in the course of gaining a licence	
mentioned in paragraph (a)	
if the applicant does not hold a licence mentioned in paragraph (a),	
details of any flight radio operator's licence or radio operator's	
certificate of proficiency that the applicant holds;	
details of the applicant's experience in operating UAVs;	
evidence of the completion of any training course in UAV operation that	
the applicant has undertaken.	

I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

#### FOR OFFICIAL USE ONLY

Name and Signature of Inspector

.....

#### APPENDIX 4 APPLICATION FOR AN UNMANNED AERIAL VEHICLE OPERATOR Lao People Democratic Republic

Peace Independence Democracy Unity Prosperity

2000003

Department of Civil Aviation

Photo 3X4

#### APPLICATION FOR AN UNMANNED AERIAL VEHICLE OPERATOR

Name/Surname:	Workplace	
	Tel/Mob:	
Date of Birth	ID Card No	
Documents to be submitted		
Please tick and attach evidence		
the applicant's structure and organization; and		
its staff and their qualifications and experience (including, in particular, the names,		
qualifications, experience, duties and functions of the persons who are to be the		
applicant's chief UAV controller and maintenance controller); and		
its facilities and equipment; and		
its practices and procedures; and		
a general description of the proposed operations, including the type or types of		
UAV to be used		
a copy of each of the applicant's manuals relevant to the operation of UAVs		

I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

FOR OFFICIAL USE ONLY
Name and Signature of Inspector
.....

APPENDIX 5 UNMANNED AERIAL VEHICLE CONTROLLER LICENSE Lao People Democratic Republic Peace Independence Unity Democracy and Prosperity

> Ministry of Public Work and Transportation Department of Civil Aviation of Laos

# Unmanned Aerial Vehicle Controller License (UAVCL)

Holder name:

Validity:

This is to certify that: Mr/Miss/Mrs...... has competency in compliance with the standards established by the Department of Civil Aviation of Lao PDR as the Unmanned Aerial Vehicle Controller

**Director General** 

Vanpheng Chanthaphone

Vientiane, Lao PDR XX/XX/20XX

APPENDIX 6 UNMANNED AERIAL VEHICLE OPERATOR CERTIFICATE Lao People Democratic Republic Peace Independence Unity Democracy and Prosperity

> Ministry of Public Work and Transportation Department of Civil Aviation of Laos

# Unmanned Aerial Vehicle Operator Certificate (UAVOC)

Company name:

Validity:

This is to certify that: ...... has its organization in compliance with the standards established by the Department of Civil Aviation of Lao PDR as the Unmanned Aerial Vehicle Operator

**Director General** 

Vanpheng Chanthaphone

Vientiane, Lao PDR XX/XX/20XX

#### APPENDIX 7 APPLICATION REQUESTING FOR UAV OPERATOR PERMIT Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

80000G

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR UAV OPERATOR PERMIT

Name/Surname:	Workplace		
	Tel/Mob:		
Date of Birth	ID Card/Passport No		
Information to be given to Lao DCA			
Name, address and phone number of the person			
operating the UAVs			
Purpose of the operation			
Place where the UAV be operated			
Documents to be submitted		Please	
		Check	
General			
A copy of Identification Card or Valid Passport			
A copy of family book (Lao Residence)			
Drone Model, Band, Number of drone, Manufacture's Plate, Operation Limitation			
and Equipment.			
A copy of Insurance covering the third party.			
Letter to certify that the person operating the drone meets the requirements			
mentioned in Part 6, 6.4, b), 3) in the Lao Civil Aviation Safety Regulation Part			
17 – Unmanned Aircraft.			
Operation Document			

• • •	Illustration of the type of operation/activity to be conducted: Equipment(s) used to communicate and control the UA, as well as additional systems that are installed should be included	
. ,	Unmanned Aircraft (UA) and Ground Control Station (GCS) specifications: Equipment(s) used to communicate and control the UA, as well as additional systems that are installed should be included	
(3)	Picture(s) clearly showing the UA and what is/are being carried by the aircraft (if applicable).	
(4)	Details on emergency procedures and flight checks carried out for all envisage operations of the UAS.	
(5)	Maintenance plan with description of maintenance performed or to be performed on the UA.	
(6)	General procedures for incident or accident reporting.	
(7)	General procedures for management of casualties arising from any incident or accident.	
(8)	For customised UA, to provide documents supporting design considerations and analysis and test records conducted to validate UA design.	
Supp	orting Documents	
	<ul> <li>Supporting evidence of remote pilot training, licence and past experience as follows:</li> <li>Proof of any UAS training or course attended and details;</li> <li>Proof of any previous or existing unmanned aircraft licence or permit issued by other Authorities;</li> <li>Proof of any similar activity previously carried out by the remote pilot.</li> </ul>	
2)	Record of last maintenance performed, last defect rectified and last date flown for each unmanned aircraft model and ground control station. Please also indicate the date when each unmanned aircraft model and ground control station were purchased.	
3)	Local-based companies will be required to submit the company's ACRA business registration document.	
4)	Companies based overseas will be required to submit an official letter of intent from the company/government agency which has engaged your service, stating the purpose and types of operation to be conducted in Lao PDR.	

I have an honor to submit this application to request an UAV Operator Permit and I do certify that the information contained in this application is confidential.

Date:

### FOR OFFICIAL USE ONLY

Name and Signature of Inspector

.....

.....

#### **APPENDIX 8 APPLICATION REQUESTING FOR UAV ACTIVITIY PERMIT**

Lao People Democratic Republic

Peace Independence Democracy Unity Prosperity

8000003

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR UAV ACTIVITY PERMIT

Image: Support in the image: space of the space of the image: space of the spa
Information to be given to Lao DCA         Name, address and phone number of the person operating the UAAs         Purpose of the operation         Place where the UAVs be operated         Flight plan (Take-off/landing, hover/flight path, height, speed, how visual line of sight is maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
Information to be given to Lao DCA         Name, address and phone number of the person operating the UAAs         Purpose of the operation         Place where the UAVs be operated         Flight plan (Take-off/landing, hover/flight path, height, speed, how visual line of sight is maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
Name, address and phone number of the person operating the UAAs       Purpose of the operation         Place where the UAVs be operated       Flight plan (Take-off/landing, hover/flight path, height, speed, how visual line of sight is maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).       Please
operating the UAAs         Purpose of the operation         Place where the UAVs be operated         Flight plan (Take-off/landing, hover/flight path, height, speed, how visual line of sight is maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
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Place where the UAVs be operated         Flight plan (Take-off/landing, hover/flight path, height, speed, how visual line of sight is maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
Flight plan (Take-off/landing, hover/flight path, height, speed, how visual line of sight is maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).       SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
height, speed, how visual line of sight is         maintained, number and position of pilots and         observers, etc). Please provide a map or floor         plan (e.g. Google satellite map at the appropriate         scale) of the activity site with annotation of         launch/recovery point(s) and any horizontal flight         path of the unmanned aircraft. Indicate if the         activity is conducted for, or within proximity of an         organised event where crowds are expected         (marathon, festival, exhibition, parades, events,         etc).
maintained, number and position of pilots and observers, etc). Please provide a map or floor plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).       Please
observers, etc). Please provide a map or floor         plan (e.g. Google satellite map at the appropriate         scale) of the activity site with annotation of         launch/recovery point(s) and any horizontal flight         path of the unmanned aircraft. Indicate if the         activity is conducted for, or within proximity of an         organised event where crowds are expected         (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE         Please
plan (e.g. Google satellite map at the appropriate scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).Please
scale) of the activity site with annotation of launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
launch/recovery point(s) and any horizontal flight path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
path of the unmanned aircraft. Indicate if the activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
activity is conducted for, or within proximity of an organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE       Please
organised event where crowds are expected (marathon, festival, exhibition, parades, events, etc). SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE Please
(marathon, festival, exhibition, parades, events, etc).         SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE         Please
etc). SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE Please
SUPPORTING DOCUMENTS TO BE PROVIDED FOR APPLICATION TO USE Please
A copy of Identification Card or Valid Passport
A copy of family book (Lao Residence)
Drone Model, Band, Number of drone, Manufacture's Plate, Operation Limitation
and Equipment.
A copy of Insurance covering the third party.
Letter to certify that the person operating the drone meets the requirements
mentioned in Part 6, 6.4, b), 3) in the Lao Civil Aviation Safety Regulation Part
17 – Unmanned Aircraft.
1) Evidence of adequate insurance coverage for the intended activity;
<ol> <li>Supporting documents to prove the availability of systems, software, or mechanisms, e.g. manufacturer or product specification, that serve to;</li> </ol>

	<ul> <li>ensure that the unmanned aircraft operation can be confined within the planned area of operation;</li> </ul>	
	ii. provide in-flight monitoring of critical system parameters (battery power, rotor performance etc.);	
	iii. allow post flight review of the flight profile.	
3)	An illustration of how the unmanned aircraft will drift in the event of power failure at maximum operating height.	
4)	4) <b>Clearance</b> from the Ministry of National Defense for aerial photography and/or overflight of security-sensitive locations	
	<b>Certificate</b> for the use of radio frequencies and power from Ministry of Post and Telecommunication (MPT)	
	<b>Clearance</b> for Manufacturing, Assembling, Importing, Exporting, Selling from appropriate governmental organizations.	

I have an honor to submit this application to request an UAV Activity. I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

FOR OFFICIAL USE ONLY

Name and Signature of Inspector

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#### APPENDIX 9 APPLICATION REQUESTING FOR THE RELEASE OF ROCKETS AND HOME-MADE ROCKETS

### Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE RELEASE OF ROCKETS AND HOME-MADE ROCKETS

Name/Surname:	Workplace
	Tel/Mob:
Date of Birth	ID Card No
Details of launching of rocket to be given to Lac	DCA
The name, address and telephone number of the	
person who will launch the rocket/home-made	
rocket (or, if several people will be involved, the	
name, address and telephone number of the	
person who will coordinate the launching)	
Number of rockets to be released	
The date and time the rocket is to be launched	
Where it is to be carried out	
The size and mass of the rocket	
The estimated greatest altitude or flight level that the	e rocket will reach
If more than 1 rocket is to be launched at a time, ho	w many rockets are to be
launched at the time	

I have an honor to submit this application to request for a release of rocket/home-made rocket and I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

FOR OFFICIAL USE ONLY

Name and Signature of Inspector

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#### **APPENDIX 10 APPLICATION REQUESTING FOR THE DISPLAY OF FIREWORKS**

Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE DISPLAY OF FIREWORKS

Name/Surname:	Workplace Tel/Mob:	
Date of Birth	ID Card No	
Information to be given to Lao DCA		
The name, address and telephone number of the		
person who will operate the display (or, if several		
people will be involved in its operation, the name,		
address and telephone number of the person who		
will coordinate it)		
The date the display is to begin, the starting time, and how long it is to last		
Where it is to be given		
How many projectile capable of reaching more than 400 feet above		
ground level are to be used in the display		
A general description of the pyrotechnic characteristics of each such		
projectile		
The estimated highest altitude that any projectile can reach		
The maximum burst radius of the pyrotechnics in a projectile		

I have an honor to submit this application to request for an operation of firework display and I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

FOR OFFICIAL USE ONLY		
Name and Signature of Inspector		

#### APPENDIX 11 APPLICATION REQUESTING FOR THE RELEASE OF SKY LANTERNS

Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE RELEASE OF SKY LANTERNS

Name/Surname:	Workplace	
	Tel/Mob:	
Date of Birth	ID Card No	
Details of releasing the sky lanterns to be given to Lao DCA		
The name, address and telephone number of the		
person who will release (or, if several people will b	e	
involved in its releasing, the name, address and		
telephone number of the person who will coordinat	e it)	
Number of sky lanterns to be released		
The date and time the sky lantern is to be released		
Where it is to be carried out		
The size and mass of the sky lanterns		
The estimated greatest altitude or flight level that		
the sky lantern will reach		
If more than 1 sky lantern is to be released at a		
time, how many sky lanterns are to be launched at		
the time		

I have an honor to submit this application to request for the release of sky lanterns and I do certify that the information contained in this application is confidential.

**Applicant Signature** 

Date:

FOR OFFICIAL USE ONLY Name and Signature of Inspector

#### APPENDIX 12 APPLICATION REQUESTING FOR THE OPERATING OF TETHERED BALLOONS AND KITES

# Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE OPERATIONS OF TETHERED BALLOONS AND KITES

Name/Surname:	Workplace	
	Tel/Mob:	
Date of Birth	ID Card/Passport No	
Information to be given to Lao DCA		
The name, address and telephone number of the		
person who will operate the tethered balloons or		
kites (or, if several people will be involved in its		
operation, the name, address and telephone		
number of the person who will coordinate it)		
The date and time the operation is to begin, and how long it is to last		
Where it is to be carried out		
A brief description of the balloon or kite, including its predominant color		
The height to which it is to be operated		
Its mass		
If more than 1 tethered balloon or kite is to be operated at a time, how		
many tethered balloons or kites are to be operated at the time		

I have an honor to submit this application to request for the operation of tethered balloon/kite and I do certify that the information contained in this application is confidential.

**Applicant Signature** 

Date:

FOR OFFICIAL USE ONLY
Name and Signature of Inspector

# APPENDIX 13 APPLICATION REQUESTING FOR THE RELEASE OF LIGHT BALLOON

# Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE RELEASE OF LIGHT BALLOON

Name/Surname:	Workplace Tel/Mob:	
Date of Birth	ID Card No	
Information to be given to Lao DCA		
The name, address and telephone number of the		
person who will release the light balloon (or, if		
several people will be involved in its releasing,		
the name, address and telephone number of the		
person who will coordinate it)		
The date and time the release is to begin		
Where it is to be carried out		
The estimated size and mass of the balloon's payload		
If more than 1 balloon is to be released at a time, how many balloons are		
to be released at the time		

I have an honor to submit this application to request for a release of light balloon and I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

FOR OFFICIAL USE ONLY
Name and Signature of Inspector

#### APPENDIX 14 APPLICATION REQUESTING FOR THE RELEASE OF HELIUM BALLOONS

# Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE RELEASE OF HELIUM BALLOONS

Name/Surname:	Workplace			
	Tel/Mob:			
Date of Birth	ID Card No			
· · · · · / · · · · /				
Details of release of small/helium balloons to be given to Lao DCA				
The name address and talenhans much an of the				
The name, address and telephone number of the				
person who will release the helium-balloon (or, if				
several people will be involved the releasing, the				
name, address and telephone number of the				
person who will coordinate the release)				
The date and time the release is to begin and how long it will take				
The date and time the release is to begin, and how long it will take				
Where it is to be carried out				
How many balloons are to be released				
The estimated size and mass of any payload				

I have an honor to submit this application to request for a release of helium-balloon and I do certify that the information contained in this application is confidential.

Applicant Signature

Date:

Name and Signature of Inspector	FOR OFFICIAL USE ONLY	
	Name and Signature of Inspector	

#### APPENDIX 15 APPLICATION REQUESTING FOR THE RELEASE OF MEDIUM-HEAVY BALLOON

Lao People Democratic Republic Peace Independence Democracy Unity Prosperity

Department of Civil Aviation

Photo 3X4

#### APPLICATION REQUESTING FOR THE RELEASE OF MEDIUM-HEAVY BALLOON

Name/Surname:	Workplace	
	Tel/Mob:	
Date of Birth	ID Card No	
Information to be given to Lao DCA		
The name, address and telephone number of the		
person who will release the balloon (or, if several		
people will be involved in its releasing, the name,		
address and telephone number of the person who		
will coordinate it)		
The date and time the release is to begin		
Where it is to be carried out		
The estimated size and mass of the balloon's payload		
The balloon's flight identification or the project code name		
The balloon's classification, or a description of the balloon		
The balloon's SSR code or NDB frequency		
The expected horizontal direction of the balloon's ascent, and the balloon's expected		
rate of climb		
The balloon's planned float level (given as pressure altitude)		
The time the balloon is expected to reach 60 000 feet pressure altitude, and the location		
over which it is expected to do so		
The time the flight is expected to end, and where the balloon and its payload are		
expected to fall		
If more than 1 balloon is to be released at a time, how many balloons are to be released		
at the time		

I have an honor to submit this application to request for a release of medium-heavy balloon and I do certify that the information contained in this application is confidential.

**Applicant Signature** 

Date:

FOR OFFICIAL USE ONLY
Name and Signature of Inspector